

## **Digital Watermarking and Fingerprinting Applications**

### **Abstract**

Methods and systems include: (1) steganographically embedding location information in images, where the location information is obtained from remote sources  
5 like a cell phone network or remote GPS receiver; (2) steganographically embedding participant IDs in content to ensure proper billing and royalty tracking; (3) providing a fingerprint database which is limited to a play list for a particular broadcast network over a predetermined period; (4) providing fair-use content management based upon digital watermark-tracked usage; (5) providing micro-payments based upon watermarked ID  
10 cards for retailers; or (6) providing watermarked logon cards, such as watermarked hotel room keys, to better provide internet logon access control.